

Title (en)

Electromagnetic actuating device capable of partially holding electrification after being actuated in parallel connection

Title (de)

Elektromagnetische Auslösungsvorrichtung, die zur teilweisen Aufrechterhaltung der Elektrifizierung nach Auslösung in einem Parallelanschluss fähig ist

Title (fr)

Dispositif à actionnement électromagnétique capable de supporter partiellement l'électrification après avoir été activé dans une connexion parallèle

Publication

EP 2264724 A1 20101222 (EN)

Application

EP 09251596 A 20090618

Priority

- EP 09251596 A 20090618
- US 8172008 A 20080421
- JP 2008082209 A 20080326

Abstract (en)

At least two sets of driving coils of the same individual electromagnetic actuating device of the present invention in parallel connection or series and parallel connection to appear relatively lower impedance being actuated to obtain larger actuating force is further manipulated by the switching device to only partially electrified coils thus reducing current passing through driving coils, while required operating characteristics of the electromagnetic actuating device can still be satisfied by the electromagnetic effective force.

IPC 8 full level

H01F 7/18 (2006.01); **H01H 47/08** (2006.01)

CPC (source: EP US)

H01F 7/1833 (2013.01 - EP US); **H01F 7/1877** (2013.01 - EP US); **H01F 7/1844** (2013.01 - EP US); **H01H 47/08** (2013.01 - EP US)

Citation (search report)

- [X] US 5510951 A 19960423 - BRIEDIS GUNARS [US], et al
- [X] EP 1353348 A1 20031015 - MATSUSHITA ELECTRIC WORKS LTD [JP]
- [X] US 5523684 A 19960604 - ZIMMERMANN DANIEL E [US]
- [X] US 2002166541 A1 20021114 - YAMAKADO MAKOTO [JP], et al
- [X] US 3425009 A 19690128 - VOIGT ROBERT H, et al
- [X] FR 1360239 A 19640508 - APP THERMOFLEX ETABLISSEMENTS

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

US 2009261930 A1 20091022; EP 2264724 A1 20101222; JP 2009240056 A 20091015

DOCDB simple family (application)

US 8172008 A 20080421; EP 09251596 A 20090618; JP 2008082209 A 20080326